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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 09/889,253 | 11/27/2001 | Michael Stanford Showell | CM2006XM | 2504 |

27752 7590 06/30/2004

THE PROCTER & GAMBLE COMPANY
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CINCINNATI, OH 45224

EXAMINER

KUMAR, PREETI

ART UNIT PAPER NUMBER

1751

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 09/889,253 | Applicant(s) SHOWELL ET AL. | |
| | Examiner Preeti Kumar | Art Unit 1751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1, 8 and 30 are amended.
2. Claims 1-30 are pending with claim 1 being independent.
3. The rejection of claims 1-8, 10-11, 21-24 and 26-30 under 35 U.S.C. 102(b) as being anticipated by Herbots et al. (WO 98/06808) is maintained for the reasons recited in the previous office action.
4. The rejection of claim 9 under 35 U.S.C. 103(a) as being unpatentable over Herbots et al. (WO 98/06808) in view of Bostick (US 5,334,326) is maintained for the reasons of record, cited in the previous office action.
5. The rejection of claim 25 under 35 U.S.C. 103(a) as being unpatentable over Herbots et al. (WO 98/06808) is maintained for the reasons of record, cited in the previous office action.
6. The rejection of claims 12-20 under 35 U.S.C. 103(a) as being unpatentable over Herbots et al. (WO 98/06808) in view of Miracle et al. (WO 97/10323) is maintained for the reasons of record, cited in the previous office action.

Response to Arguments

7. Applicant's arguments filed on March 19, 2004, have been fully considered but they are not persuasive because excising the recitation of a pectate lyase produced by *Erwinia* species does not overcome the teaching of pectate lyase EC 4.2.2.2. Herbots et al. teach the utility of pectate lyase specifically having the EC # 4.2.2.2. It is well known in the art that pectate lyase (EC 4.2.2.2) is available from various organisms

such as *Aspergillus nidulans*, *Bacillus agaradhaerens*, *Aspergillus niger*, *Bacillus halodurans*, *Bacillus licheniformis*, *Bacillus subtilis*, *Erwinia carotovora*, *Erwinia chrysanthemi* to name a few, please see the website http://afmb.cnrs-mrs.fr/CAZY/PL_1.html which illustrates the state of the art. Herbots et al. teach that the pectate lyase (EC 4.2.2.2) can be produced by the *Erwinia* species and by *Bacillus* species. See page 7, 1st paragraph and page 57, definition of pectin degrading enzyme.

New Grounds of Rejection

8. Claims 1-8, 10-11, 21-24 and 26-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Herbots et al. (WO 98/06808).

Herbots et al. are relied upon as set forth in the previous office actions and above. Specifically, Herbots et al. teach detergent compositions, including dishwashing, hard surface cleaning, and laundry compositions containing an alkaline pectin degrading enzyme for improved overall cleaning performance and enhanced stain/soil removal benefits, especially improved removal of plant, dried-on fruit and vegetable juice soils/stains. See abstract. Herbots et al. define that the term "pectin degrading enzyme" is intended to encompass pectin lyase (EC 4.2.2.10) and pectate lyase (EC 4.2.2.2) and other polygalacturonase enzymes. See pg. 5, (last paragraph). The alkaline pectin degrading enzymes are natural mixtures of the above mentioned enzymatic activities. See pg.6, (top). Herbots et al. also teach that the pectin degrading enzyme is incorporated into the compositions in accordance with the invention

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preferably at a level of from 0.0001% to 2%. See 3rd paragraph on pg.6. Herbots et al. also teach that the inclusion of surfactants, such as ethoxylated alcohol and/or polyethylene glycol, are of great value in detergent compositions containing alkaline pectin degrading enzymes. See 2nd paragraph on pg.9, pg.50 2nd paragraph, and example 13 on pg.78. Herbots et al. teach the utility of biodegradable quaternary ammonium compounds. See pgs.38-41. Herbots et al. teach that the peroxygen source may comprise a peracid compound as recited by instant claim 23. Herbots et al. also teach that the hydrogen peroxide source may be selected from perborate, percarbonate, and/or perphosphate compounds. See pg. 17, 2nd paragraph. Herbots et al. also teach the utility of the detergent composition in essentially any washing or cleaning methods, including soaking methods, pretreatment methods and methods with rinsing steps for with a separate rinse aid composition may be added. See pg. 53 1st paragraph. Herbots et al. teach in example 15, formulation IV, a detergent composition comprising, a pectate lyase enzyme, a metal bleach catalyst (pentaamine acetate cobalt III salt), and a combination of a peroxygen source (perborate) and bleach booster (benzoyl peroxide).

Accordingly, the teachings of Herbots et al. specifically to a pectate lyase (EC 4.2.2.2) anticipates the material limitation to pectate lyase produced by the broad scope of organisms recited by the instant claim 1.

Alternatively, even if the broad teachings of Herbots et al. are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at a detergent composition comprising

a pectate lyase produced by the organisms recited by the instant claims because Herbots et al. suggest a specific pectate lyase (EC 4.2.2.2) which is known in the art to be produced by the organisms recited by the instant claims. Please see the website http://afmb.cnrs-mrs.fr/CAZY/PL_1.html which illustrates the state of the art.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 571-272-1316. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Preeti Kumar
Examiner
Art Unit 1751

**MARGARET EINSMANN
PRIMARY EXAMINER
GROUP 1100**

PK